

Case Study

Introduction

Across state and federal agencies there is a growing recognition of the need to support increased transparency, accountability, and effectiveness in programs. The desire for enhanced performance and accountability has solidified the preference to use practices for which effective evidence is available. While there is a widening recognition on how evidence-informed practice helps increase the efficient use of resources, serious challenges remain to integrating this approach into the TANF field. For too long a majority of program outcomes have been measured anecdotally and additional efforts are required to develop consistent documentation and data collection strategies across programs.

Ten promising programs have been selected to participate in a national initiative sponsored by the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Family Assistance. The Promising Pathways Initiative provided these programs with individualized technical assistance designed to improve their capacity to collect evidence that articulates their program outcomes.

Through a series of technical assistance activities each site had the opportunity to build capacity by identifying their program components and practices; developing and documenting evidence; and sharing data that depicts program effectiveness. Each site had a dedicated team consisting of a coach, data specialist and support specialist assigned to provide targeted technical assistance while documenting the aspects of the site's program that allowed it to be promising in its use of evidence informed practices.

Site Description:

The **Arkansas Career Pathways Initiative (CPI)** is an education and training initiative administered by the Arkansas Department of Higher Education (ADHE) at Arkansas two-year colleges which is designed to enable low-income parents to acquire the degrees and credentials required to obtain and hold jobs in selected high-demand, high wage industries. The CPI model was first initiated in Arkansas in 2003, when the Arkansas Association of Two-Year Colleges (AATYC), the Southern Good Faith Fund (SGFF), and the Governor's Office, with a grant from the National Governors Association Center for Best Practices, piloted the first career pathways effort to develop a strategy for improving educational attainment for low-income and low-skilled adults in partnership with Southeast Arkansas College in Pine Bluff. The model was unique in that it focused on non-traditional students by combining extensive student support, developmental education offerings, and a focus on high-wage and/or high-demand occupations.

Following the pilot, the state TANF agency, the Arkansas Transitional Employment Assistance program (TEA), in partnership with ADHE replicated the program at 10 additional two-year colleges throughout the state. The initiative became codified by state mandate in 2005 under the state's Department of Workforce Services (DWS), and by 2007 had expanded to an additional 11 two-year college sites and 3 technical college campuses affiliated with four-year universities, for a total of 25 campuses statewide

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(see Exhibit 1). These community and technical college campuses provide a comprehensive set of academic and support services that allow CPI participants to earn degrees and credentials ranging from GEDs and vocational credentials to Associate degrees leading to higher paying jobs in their local areas.

Specifically, state statute Act 514 of 2007 mandates that the Career Pathways Initiative shall:

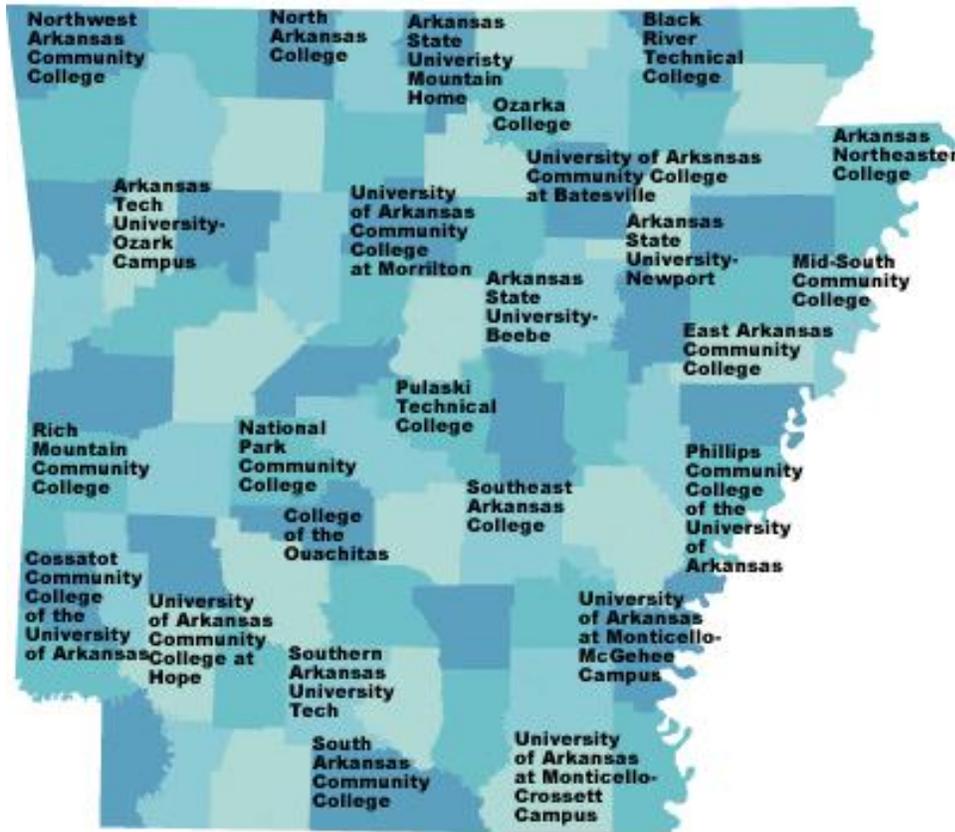
- Increase the access of low-income parents and other individuals to education credentials that qualify them for higher-paying jobs in their local areas;
- Improve the preparedness of the Arkansas workforce for high-skill and high-wage jobs; Develop training courses and educational credentials after consulting local employers and local workforce boards to identify appropriate job opportunities and needed skills and training to meet employers' needs;
- Improve the preparedness of the Arkansas workforce for high-skill and high-wage jobs; Develop training courses and educational credentials after consulting local employers and local workforce boards to identify appropriate job opportunities and needed skills and training to meet employers' needs;
- Provide resources on the basis of performance incentives, including participants:
 - Enrolling in courses;
 - Completing the courses; then
 - Obtaining jobs in the targeted job categories; and
 - Staying employed in the targeted job categories.

CPI currently receives \$13,000,000 in state TANF funding annually which it allocates to individual CPI sites located on campuses across the state. While CPI is funded with TANF dollars it is not solely limited to recipients of TANF cash assistance, or TEA clients as they are called in Arkansas. Basic eligibility requirements include: An adult caretaker, parent or relative of a child under the age of 21 living in the home, who is receiving TEA now or has received TEA in the past; or, is receiving food stamps or Medicaid; or, who has an annual family income below 250 percent of the federal poverty level (about \$46,000 annually for a family of three). Given the high poverty rates across the state of Arkansas, a significant percentage of custodial parents meet the low-income requirements and since only 18% of Arkansas residents have a postsecondary credential, the potential pool of Career Pathways students is quite large. Arkansas currently has the highest percentage in the U.S. (tied with WV) of adults ages 18-64 who have a high school diploma but are not earning a living wage. And Arkansas ranks 46th in the nation in the percentage of adults with an associate's degree and 49th in the nation with the percentage of citizens with a bachelor's degree. Preference in the CPI is given to individuals who show an aptitude for successfully completing a credential and gaining employment, although campuses are given a quota for how many TEA (extremely low-income) students they must enroll.

In FY 2010 the Career Pathways Initiative enrolled 10,017 students, and awarded 2128 employability certificates, 755 technical certificates, 763 Associate degrees, 51 GEDs and 736 Certificates of Proficiency.

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Exhibit 1. Map of Arkansas Career Pathways Initiative sites



How Does the Arkansas Career Pathways Initiative Define Their Practice?

The CPI has developed more than 400 tiered educational pathways bringing together two-year colleges and workforce entities to provide participants with employability skills, basic skills, remediation, and advanced skills training in high-demand occupations. Students can earn a Career Readiness Certificate (CRC), college-level Certificates of Proficiency, Technical Certificates or Associate Degrees in a wide range of career technical programs. The Department of Workforce Services has worked to establish agreements with businesses across the state to give priority status to applicants who have earned an employability certificate like the CRC, and the certificate has become widely recognized as a measure of job readiness.

Entering CPI students receive career assessment counseling using the Kuder (Arkansas College and Career Planning System) as well as WorkKeys training and assessment which include modules assisting students with basic academic, computer and job readiness skills. CPI sites also utilize local labor market data to identify local job opportunities. Other available services provided on as needed basis include: support for tuition, fees, books, child care, transportation as well as tutoring and counseling support.

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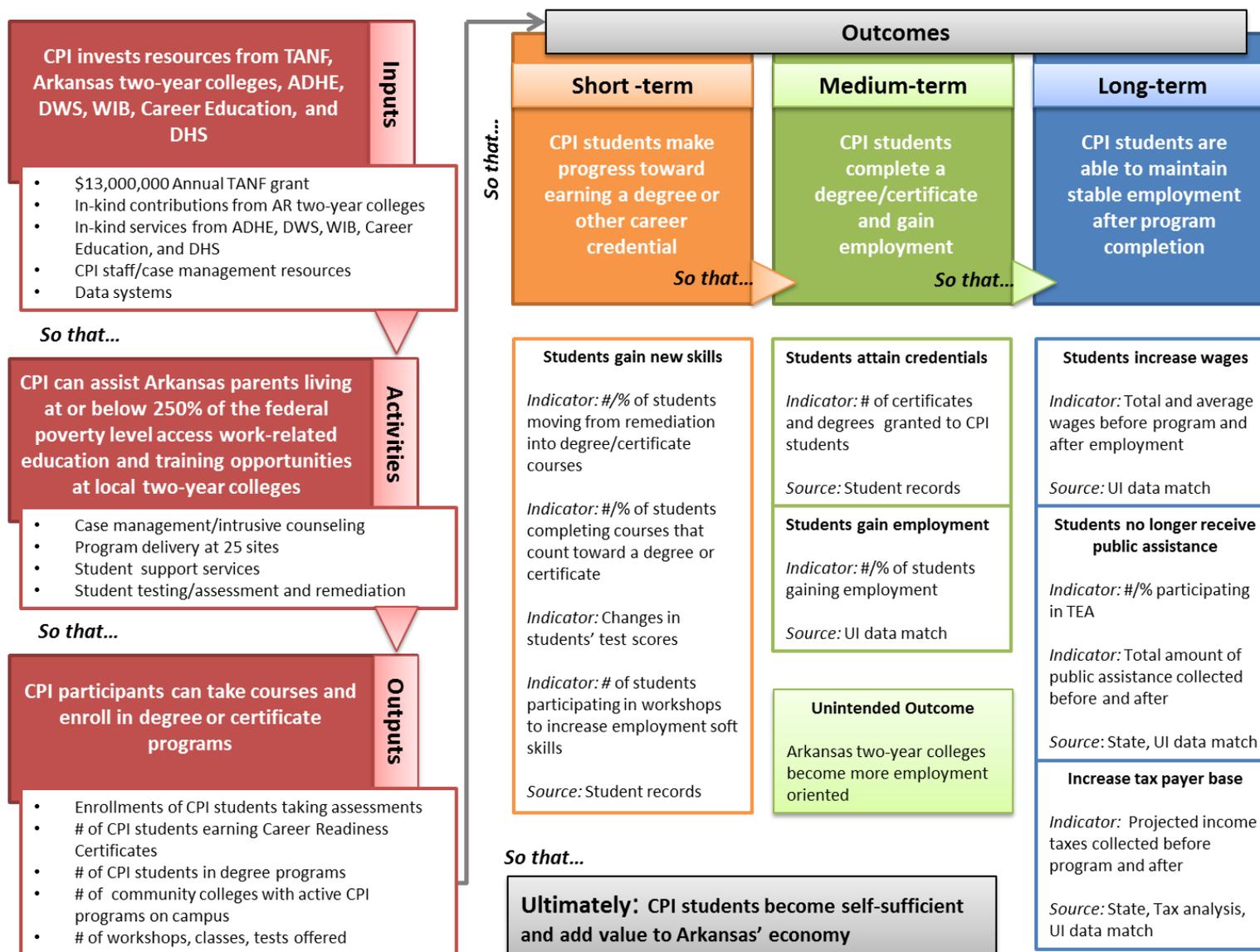
In keeping with their Memorandum of Understanding with the DWS and with state statute, the ADHE has drafted performance measures with incentives for each CPI site. The measures include goals for student enrollment, attainment of certificates and degrees, entering employment in targeted job categories and continued employment in targeted job categories at six and twelve months. DWS requested the addition of a performance goal for enrolling TEA and Work Pays clients. One million dollars of the CPI annual allocation is set aside each year and used as Performance Based Student Support funds, awarded to different campuses on the basis of institutional performance in fulfillment of CPI goals.

Development of a Logic Model

Prior to the Promising Pathways Initiative, CPI did not utilize logic models in the design or monitoring of their program. One aspect of the technical assistance provided by the Promising Pathways team in Arkansas focused on helping CPI to develop a logic model and map the data they already collect to evidence-based outcomes. Together, CPI staff and the Promising Pathways team developed a logic model (see Exhibit 2) that demonstrates the process CPI utilizes to turn investments from TANF, Arkansas two-year colleges, ADHE, the Department of Workforce Services (DWS), the Workforce Investment Board (WIB), Career Education, and the Department of Human Services (DHS) into long-term self-sufficiency for CPI students and added value for Arkansas' economy.

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Exhibit 2. Arkansas Career Pathways Initiative Logic model



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How does the Career Pathways Initiative use data?

ADHE incorporates a rigorous data collection and analysis system into its CPI program model. Data is collected and used to determine program eligibility, career clusters, and to measure program outcomes, progress, and performance. CPI employs system-level Program Specialists who are dedicated to data collection and analysis and each CPI site generally has an individual assigned to data collection and data entry. ADHE staff manages the statewide collection and analysis of campus data to report to the state Department of Workforce Services and to the TANF agency. ADHE use Access and Excel software to track and capture data. Community and technical college campus use sophisticated student information system (SIS) data bases to track individual student academic records.

Data Collection

The CPI data collection system consists of documented eligibility information taken upon student admission to the program, program level and regional workforce data. Data is collected from participants prior to acceptance into the program (from the participant application), then again at several points during the program and for up to one year after the participants have departed or completed a degree or certificate in the CPI. Unit record data collected on each participant include eligibility documentation, certificate/degree completions and employment outcomes. Program level data includes information on attendance, completions, certification/degrees earned, and support services utilized.

Documentation used for admissions into the CPI includes information on a potential participant's enrollment in public assistance programs, such as TEA cash assistance, Food Stamps, or Medicaid, and federal tax returns to document low-income status. Demographic information on age, race, marital status, and citizenship is collected on the application as well as information on education and employment history including educational attainment, goals, potential programs of study, and GPA. Employment information includes a history of all jobs held, job responsibilities, starting and ending salaries, and average hours worked per week. Also included is information on military service and personal references.

Program level data track the numbers of students enrolled and the numbers that attained certificates and degrees by career cluster. CPI utilizes occupational and industry sector projections collected from DWS and private sources to evaluate the job categories that offer potential for growth in Arkansas. The system also tracks post completion employment information by occupation, industry sector, and starting salary. ADHE also has access to unemployment insurance (UI) wage data maintained by the DWS that allows them to do a match of social security numbers of CPI completers to track employment history, retention, and wages for past participants. Employment is tracked for up to one year after completion.

Use of Data

To determine career clusters, ADHE has utilized outside contractors to complete gap analysis studies and provide regional labor market overviews. Gap Analysis studies analyze occupations and industries projected to be in high demand and analyze educational attainments to determine where workforce

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“gaps” are likely to exist. Using this regional labor market information, ADHE has identified occupations in manufacturing, health care and social assistance, transportation and warehousing, professional and technical services, and management of companies and enterprises that are projected to need additional trained workers. CPI participants are encouraged to earn degrees or certificates that prepare them for these high wage/high demand fields.

As mentioned earlier, ADHE also conducts an annual study measuring campus performance in meeting program goals that is linked to incentive funding. Performance measurements include enrollment levels by year, number of certificates/degrees attained by type, success rates of students, and employment retention rates. Past years are compared to measure the change in performance. The number of certificate/degrees attained, are measured against a performance goal, which in 2010 was 50% of enrollment. Success rates of students are measured by analyzing information on particular cohorts as they enter and complete the program. Information by cohort includes the number completing a certificate or degree, the number that are retained, and the number withdrawing or dropping out. An additional performance measurement includes employment retention rates. Retention rates for CPI program completers are measured using UI data (described above). The stated goal is to have 80% of program completers who entered employment, be retained in their employment after the first six months and 80% of those workers remain employed for at least twelve months.

In addition to the above performance measures, descriptive statistics such as demographic data, educational attainment, and eligibility data is also documented in the progress report. Total enrollment is compared for five years, measuring growth in the number of participants served. Participant demographics, such as age, gender, and race, are documented. Educational attainment measures the number of certificates/degrees attained by type; which include GEDs, WAGE/Employability Certificates, Certificates of Proficiency, Technical Certificates, and Associate degrees. Educational attainment data is shown for two years, measuring year-over-year change. Eligibility data, such as the number of participants enrolled in various public assistance programs and qualifying incomes are also documented. Finally, the progress report also includes a plan promoting systemic change and next steps for the program.

The ability to track participant employment and wages through the use of UI data provides a unique opportunity to measure long-term outcomes and performance. Although, currently CPI only uses UI data to track participate employment and wages for one year, it is possible to look at long-term performance using real data, rather than rely on small sample sets or surveys. This information allows CPI to study the long-term impacts of its program at both the individual participant level and at a macro-level, such as the impact on state and local tax revenue generation and the regional economic impact of its programs. One such study that CPI is interested in conducting is a Return-On-Investment (ROI) study. A model that simulates state tax revenue generation and saving in public assistance payments was created for ADHE as part of the Technical Assistance provided by the Promising Pathways team. A small sample set of UI data of past participants was used in the model to estimate the ROI that CPI provides the State of Arkansas. With the collection of further UI data, a robust ROI can be projected for the CPI program, showing the positive contribution that is being generated for the tax base of the State of Arkansas as a result of the investment of TANF funds into the education and training of low-income

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citizens across the state. The ROI study will be discussed in more detail in the Technical Assistance section of this case study.

Data/Results Dissemination

Because of the size, scope and unique success of the program, the CPI has generated significant interest across the country and has received particular attention and recognition from federal authorities, requests for information from other states, and praise from philanthropic foundations. ADHE disseminates CPI program performance data through various publications, including newsletters, fact sheets, and annual reports. The individual community colleges may also periodically produce publications that describe program performance. As mentioned above, yearly progress reports are also conducted, but their dissemination is typically limited to ADHE staff and other state agencies.

Technical Assistance Provided by the Promising Pathways Initiative:

The Promising Pathways team discussed a number of potential areas for technical assistance during its four month interaction with the ADHE. Over the course of three site visits and a series of conference calls, Promising Pathways and ADHE staff worked together to identify and address several areas of the program where additional evidence informed practices could further strengthen the work of the CPI.

1. Identifying Long-Term Program Outcomes

ADHE would benefit from developing greater capacity in its focus on long-term outcomes of the CPI program. ADHE has a robust system in place to measure short-term outcomes, such as completion rates, degrees/certificates earned, and employment information. What is missing, however, are systems that allow ready tracking of participants by cohorts and beyond one year of program completion. Long-term outcomes of the program on individuals include wage gains, decreases in reliance on public assistance, economic self-sufficiency, and subsequent increases in state and local tax revenue collection. Also missing is a macro-analysis of the impact of CPI contributions to job and economic growth in various regions of the state and by workforce sector. Information on the contributions of CPI in delivering these long-term outcomes and how that success differs among career clusters and service offerings could greatly inform decisions made at both the state and local levels regarding public investments in particular education and training programs and interventions.

2. Development of a Logic Model

Program outcomes were also discussed and technical assistance provided in the context of developing a comprehensive logic model for the CPI. A logic model can identify and visually depict how program inputs, activities, and outputs generate short, medium, and long-term outcomes and how those outcomes can be measured by specific indicators.

3. Identifying CPI's ROI

A particular area of great interest to ADHE was measuring how the \$13 million dollar TANF investment in the CPI program impacts Arkansas fiscally. Significant public visibility among policymakers and key stakeholders regarding the success of this investment in education and training has generated interest on the part of other social service agencies in accessing TANF funds to support delivery of their own

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services. With many agencies in the non-profit and public sectors experiencing significant budget cuts due to the economic downturn, there has been increased demand and competition for limited TANF dollars. While ADHE has been able to document individual successes of participants in CPI programs, it has lacked the capacity to accurately measure long-term macro-level impacts on state budgets and ultimately tax revenues. The Promising Pathways team introduced the ROI concept to ADHE as one method of calculating the impact of public CPI investments on the state's fiscal bottom line.

4. Communicating CPI's Mission

Closely related to the previous discussion on increasing competition for TANF funds, is the issue of effectively communicating the mission and impact of the CPI with key stakeholders and policymakers. ADHE and its CPI staff expressed interest in exploring how other workforce education and training programs communicate about their program impacts to key external audiences.

Technical Assistance Activities

Dr. Katherine Boswell, the CPI Promising Pathways Coach, made an initial site visit in early October to Little Rock to meet with the Arkansas Department of Higher Education staff and particularly with CPI Program Director, Dr. Karon Rosa, in order to learn about the CPI program. This meeting included a discussion of potential next steps and provided the foundation for the Promising Pathways TA with the CPI.

In mid-October, shortly after the initial site visit, Dr. Rosa from ADHE and Phil Harris Assistant Director for the Temporary Assistance for Needy Families Program in the Arkansas Department of Workforce Services, traveled to the Promising Pathways kickoff meeting in Washington DC, where they participated in interactive discussions about the Promising Pathway's project and met with additional staff and project leaders. The kickoff meeting introduced the Promising Pathway sites to the logic model concept and began the process of creating individual models for each program.

The first full-team site visit occurred in November at the ADHE office's in Little Rock. During this site visit the Promising Pathways team provided an interactive overview of the logic model and discussed in detail all components of CPI and how they relate to the program logic model with a focus group of ADHE staff, representatives from CPI campus sites, and the Arkansas Association of Two Year Colleges. The ROI concept was also introduced at this site visit and the benefits of such a study as well as the data needs were discussed. This site visit also included visits to two CPI sites, at ASU-Newport and National Park Community College in Hot Springs. These visits provided the opportunity to view the program at the point of delivery and learn many of the operational details.

In January a 1.5 hour conference call was conducted by Promising Pathways and ADHE staff. The conversation focused on the type of data needed to complete an ROI study of the CPI program. Plans were made to use a small sample set of data from a CPI cohort as an example for discussing the ROI approach and methodology during the upcoming site visit.

A third and final two day site visit to ADHE offices in Little Rock occurred in February. In addition to finalizing the CPI logic model, an intensive session of TA was provided on the ROI concept. Promising

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Pathways staff developed a model to project the ROI for the State of Arkansas as a result of the CPI program. As mentioned above, this model analyzes the changes in income and generates estimates in additional tax revenue collection and saving in social assistance payments that result from the funding of the CPI program. Promising Pathway staff worked with ADHE to compile a small sample set of UI data for a CPI cohort to simulate the ROI. Methodological details and sources of data for the ROI model were presented to ADHE staff. The ROI demonstration was concluded by a discussion and interpretation of the results. Also on the agenda was a discussion of models used by other state community college systems to communicate about the value of investing in education and training programs in support of workforce development.

Technical Assistance Activities

Date	Promising Pathways Staff Involved	Career Pathways Initiative Staff Involved	Nature of the Technical Assistance Activity
October 5th, 2011	Dr. Katherine Boswell	Dr. Karon Rosa, Program Director	Site visit. Met with Karon Rosa and members of her team for an introduction to and review of documents regarding the Career Pathways Initiative. The meeting included brainstorming about possible technical assistance needs in Arkansas and a discussion of potential next steps.
October 18th, 2011	Dr. Katherine Boswell	Dr. Karon Rosa, Program Director	Katherine and Dr. Rosa met over dinner after the Promising Pathways kick-off meeting to discuss the Arkansas Career Pathway Initiative's needs in more depth and to follow up on the meeting
November 17th – 18th, 2011	Dr. Katherine Boswell Dominic Modicamore Colleen Wolfe	Dr. Karon Rosa, Program Director Mark Lane, Program Specialist	Team site visit. Gave an overview of logic modeling process to Dr. Rosa and selected CPI staff and other agency and campus representatives. Visited ASU-Newport and National Park Community College. Debriefed with Dr. Rosa and Mark Lane the data specialist and discussed data sources and possibility of ROI study.
January 12th, 2012	Dr. Katherine Boswell Dominic	Dr. Karon Rosa, Program Director Mark Lane, Program Specialist	Conference call. The conversation focused on what data CPI would need to have available at the site visit in order to complete an ROI study. It became clear in the conversation that

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	Modicamore Colleen Wolfe	Specialist	the site has access to a wide range of data, but that it is very time consuming to collect and clean that data. Plans were made to use sample data to set up the methodology for an ROI during upcoming site visit.
February 7th – 8th, 2012	Dr. Katherine Boswell Dominic Modicamore	Dr. Karon Rosa, Program Director Mark Lane, Program Specialist	Site visit. Finalized logic model details. Worked with CIP staff to collect data for an ROI model. Presented ROI model and discussed methodology, sources of data, and the ROI results for the State of Arkansas using a small sample set of preliminary data. Also shared communication materials from other states that support a campaign around “Education Pays.”

Preliminary Outcomes of the Promising Pathways Initiative in Arkansas:

Development of a Logic Model -- Although the CPI has long generated public information on its program activities and short-term outcomes, the new logic model summarizes the flow and processes of the program in a visual format that allows persons not familiar with the program to quickly and easily understand program activities and outcomes. Such a tool may be particularly valuable to the CPI as it seeks to build public support among stakeholders and secure additional funding from various public and private sources.

Development of an ROI Model -- A critical element in completing a Return-On-Investment study is access to pre- and post-program participant data. ADHE is particularly fortunate in comparison to most other TANF related education and training programs in having access to UI wage data for more than 30,000 student records of completers who have participated in the CPI program. Using UI wage data, ADHE can potentially track participants’ employment and wages for any number of years after program completion. When participant income at entry into the CPI program (as documented in initial application materials) are measured against subsequent wage increases related to improved employment opportunities, the program is able to document a significant benefit to the state through aggregated increases in income and sales tax revenue and a decrease in spending on public assistance. These positive benefits are then weighed against costs related to the public investment in the CPI. Promising Pathways staff developed a model to project the ROI realized by the State of Arkansas as a result of the CPI program which shows a positive return within a two to three year time frame, despite very conservative assumptions. A very small sample set of participants from a past cohort was used to test the model.

An un-anticipated but very positive outcome of these discussions was the engagement of the Director of the state data warehouse for Arkansas, who was invited by ADHE to participate in the ROI discussions.

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His participation in the ROI meetings and discussions led to an exploration of further areas of cooperation between ADHE and the data warehouse that has the potential to greatly enhance the ability of the CPI to collect and analyze data that can inform their practice. He will also be participating as a member of the Arkansas Promising Pathways team at the Washington Innovation Institute meetings in Washington in March.

Communication Advocacy – At the initial team visit to Little Rock participating CPI campus representatives were exposed to the process of developing a logic model and given the opportunity to practice a short “elevator speech” that CPI representatives can use to quickly describe its program to potential stakeholders. The creation of the CPI logic model and subsequent discussions during the final TA visit of the uses of data to communicate outcomes and the provision of various other models and communication campaigns with the theme “education pays” will help ADHE in communicating their program and success to a range of stakeholder audiences.

Lessons Learned:

One particularly important innovation that has been implemented by the CPI is the effective use of performance funding to serve as an incentive to the 25 site based programs to improve their student outcomes. This is a good example of using evidence to better inform and influence practice. The use of these incentive funds (which must be used in support of TANF eligible one-time investments such as a new computer labs or additional career assessment resources) are highly valued by the different programs, and a source of significant pride to those campus-based programs recognized as successful. The incentive funding formula measures an individual college’s success against a baseline of its own past performance, thus ensuring an even playing field amongst institutions.

The CPI database with more than 30,000 student records is a veritable gold mine that really needs to be extensively researched in support of a more comprehensive ROI study that could measure the ultimate impact of investing in the education and training of low-income TANF eligible participants. Such research could document not only the aggregated return to the state and federal governments, but the long term impact on participation in a CPI to individual participants and their dependents as well. Another potential area of research would be on the return of investment in particular career technical degrees over time. The Promising Pathways team hopes to partner with ADHE to seek for additional grant funds from either the government or from philanthropic foundations to continue this very important research.

The Arkansas Career Pathways Initiative is a mature well-run program with quite an extraordinary success rate. More than 74.5% of the TANF-eligible students who participate in the Career Pathways Initiative successfully complete some type of degree or certificate preparing them for entry into the workforce. That is a completion rate that any higher education institution or state system in the country would aspire to. But it is clear that technical assistance to document and support effective data collection practices as well as support for communication and advocacy efforts around program outcomes can be valuable to even a mature successful program like the Arkansas Department of Higher Education’s CPI.

